

AXMI-004 : -----MSELKGFKKSTNRCCLL-----KIINIGGRGHNKSEHYLKVCNDLSDANI-NM--ERFDKNDALEIGCHSIVSELIGNIP--GGTA : 78  
cry1aC : -----MDNPNINECIPYNCISNP-----EVEVLGGERIETG-----YTPIDISLSLTOFLSEFVP-GAGF : 56  
cry1cA : -----MEEN-NQNCQIPYNCISNP-----EEVLDDGERISTG-----NSSIDISLSLVQFLVSNFVP-GGGF : 55  
cry2aA : -----MMNVLNSGRITICDAYNVVADHPFSPFKHSLDTIOKEWEMKRW-----TDSLYAAPVVGIVTSFLLKKVGCSLI : 69  
cry3aA : MIRKGGKMPNNRSEHDTIKTTENNEVPTMHWVPLAETNPMTLEDLNYKEFLRMTADNMTEALDSSTTKDVIQKGSVVGDLGCVGFPFGCA : 95  
cry1Ia : -----MKLKNQDKHQSFSSNAKV-----DKISTDSLNETDIEIQINIHEDCLKSE-YENVEPFSASTIQTGIGIAGKILGTLGVFFAGQ : 81  
cry7aA : -----MNLNLDGYEDSMRTLNN-----SLNYPTQKALSPSLKNNNYQDFLSITERE-QPE-ALASGNTAINTVVSIVTGATLSALGVPCASF : 80

AXMI-004 : 100 \* 120 \* 140 \* 160 \* 180 \*  
cry1aC : LQFVFNQLWSRLGD-----SGUNAFMEHVEELIDTKIEGYAKNKALSELAGIQRNLETYIQLRNEWENDIE-----NSKAQKQVANYYESLEQAVERS : 166  
cry1cA : VLGIVDIIUGLFGP-----SQUDAFLVQIEQLINQRIEEFARNQAI SRLEGLSNLYQIYAFSFEWEADPT-----NPALREEMRIQFMDMNSALTTA : 144  
cry1cA : LVGLIDFVUGIVGP-----SQUDAFLVQIEQLINQRIEEFARNQAI SRLEGLSNLYQIYAFSFEWEADPT-----NPALREEMRIQFMDMNSALTTA : 143  
cry2aA : GKRIILSELWGLIFPSCSTNLMODILRETEQFLNORLNTDITLARVNAELIGLOANIREFNQOVDNFMPTQN-----PVPISITSSVNTMQQLFNR : 160  
cry3aA : LVSFYTNFLMTIMP--SEDPKAFMEQVEALMDQKADYAKNKALAEIQLQONVEDYVSALSSUOKMPVSRNPHSQGRIRELFSQAESHPRNS : 188  
cry1Ia : VASYSFILGELWPK-GKNQUGEIFMEHVEELIINQKISTYARNKALTDLKGGLDALAVYHDSLESUWGNRN-----NTRARSVVKSQVIALELMFVQK : 172  
cry7aA : ITNFKIAGLWPE-MGKIWDEFMTEVEALIDQKIEEYVRNKAIAEIDGLGSLDKYQKALADWLKQD-----DPEAILSVATEFRILDSLEFFS : 171

AXMI-004 : 200 \* 220 \* 240 \* 260 \* 280 \*  
cry1aC : MPQFAVENFEVPLLTVVYQAAANLHLALLRDVSVYGCWGWSEQKIKIYTDQKIKTHEYTHCVWYMKGLERLKNKGSYYQDWTYNNRFRREMT : 261  
cry1cA : IPLFAVQNYQVPLLSVYVQAAANLHLALLRDVSVYGCWGWSEQKIKIYTDQKIKTHEYTHCVWYMKGLERLKNKGSYYQDWTYNNRFRREMT : 237  
cry1cA : IPSFRISGFEVPLLSVYVQAAANLHLALLRDVSVYGCWGWSEQKIKIYTDQKIKTHEYTHCVWYMKGLERLKNKGSYYQDWTYNNRFRREMT : 236  
cry2aA : LPQFQIQGYQLLLPLFAQAANMHLSTFIRDVILNADWEGISAAATLRTYRDYLRNVTDRYSNYCINTYQTAFRGLMT-----RLHDMLEFRTRYMF : 249  
cry3aA : MPSPAISGVEVPLFLTTVYQAAANLHLALLRDVSVYGCWGWSEQKIKIYTDQKIKTHEYTHCVWYMKGLERLKNKGSYYQDWTYNNRFRREMT : 281  
cry1Ia : LPSPAVSGEEVPLLPPIVYQAAANLHLALLRDVSVYGCWGWSEQKIKIYTDQKIKTHEYTHCVWYMKGLERLKNKGSYYQDWTYNNRFRREMT : 265  
cry7aA : MPSPKVTGYEIPLLITVYQAAANLHLALLRDVSVYGCWGWSEQKIKIYTDQKIKTHEYTHCVWYMKGLERLKNKGSYYQDWTYNNRFRREMT : 264

AXMI-004 : 300 \* 320 \* 340 \* 360 \* 380 \*  
cry1aC : LTVLDIVALFPHYDVQYPIPTTVYQAAANLHLALLRDVSVYGCWGWSEQKIKIYTDQKIKTHEYTHCVWYMKGLERLKNKGSYYQDWTYNNRFRREMT : 344  
cry1cA : LTVLDIVALFPHYDVQYPIPTTVYQAAANLHLALLRDVSVYGCWGWSEQKIKIYTDQKIKTHEYTHCVWYMKGLERLKNKGSYYQDWTYNNRFRREMT : 313  
cry1cA : LTVLDIAAFFPNYDNRYPYIOPVQGLTREYVTDPLNPNPQ-----LQSVQALPTFNVMESRIRNPHLFDILNMLTIFDWFVSG-----RN : 319  
cry2aA : LNVFVVSIMSLFKYQSLMVSSGANLYASGSGPQQTQSFTAQNWPFYLSLQVNSNYILSGISGTRUSITFPNIGGLPGSTITHLSARVNYSG : 344  
cry3aA : LTVLDLIALFLYDVRLYPKEVKTELTRDVLTDPIVGVNNLR-----GYGTTFSNIEN-YIRKPHLFDYLRHQIRFQPCYYG--NDSF : 364  
cry1Ia : LNVLDIVALFPSYDTQMYPIKTTAQLTREYVTDALGIVHPHPSFTSTTWYNNNAPSFAIEAAVVRNPHLLDFEQVTIYSLLSRWS--NTQYM : 357  
cry7aA : LNVLDIVAVFPFPHPRRYSMETSTQLTREYVTDVPSLISN-----PDIGSPFSQMENTAINTPHLVDYDELDELYIYTSKYKAFSHEIQPDL : 350

FIG. 1A

AXMI-004	:	YYUGGHRVTSYHVGGEN--IRSPLYGREANQVEP-RDFFYGPVFKLSKFTLRPLQOPAPAPPPWNLRSLEGVEFHTPTGS-----FMYRERGVS	:	431
cry1aC	:	YYSGHQIMASPVGSGPEFTFPLGYTMGNAAPQORIVAQLGGVYRTLSSTLYRRPFMIGINNOQLSVLDGTEFAYGTSNNLPS-AVYRKSGTV	:	407
cry1a	:	FYUGGHRVTSYHVGGEN--ITSPYGREANQVEP-RSFTYMGVFKLSKFTLRPLQOPAPAPPPWNLRSLEGVEFHTPTGS-----FMYRERGVS	:	406
cry2a	:	GVSSCLIGATNLMNFMNCSTWLPPLSTPVRWLDSDGTRECVATSNWQTSFQTTLSLRCGAFSARGSNMYPDFIRNISGVPLVIRNEDLT	:	439
cry3a	:	NYSGNYSVTRPSIGSMDIITSPFYGNKSEPEVQ-NLEFNGEKYKAVANTWLAUVPASVYGVYKVEFSQYNDQTEASTQTYDSCRNVCAVSW	:	458
cry1a	:	NWUGGKLEFRTIGGTLN-ISTQGSTNTSINPTLPTFTSDVYRTSLAGNLFLTPYNGVPRVDFHKKFTHPIASDNFFYPG-YAGIGTQLQ	:	450
cry7a	:	FYUSAHKVSFKKSEQSN-LYTTIGYKTSYISSGAYSFHGNDIYRTLAAPSVVYPTQNYG--VEQVEFYGVKGVHVR-----GDNKYDLTY	:	437
AXMI-004	:	DSFNEELPPFNPVGLPHKAVYSHRLCHATFVRKSG---TPYLTGAIFSWTHRSAEFTWTFESNIIITQIPLVKAYQIGSGTIVRKGPCTGGDILRR	:	523
cry1aC	:	DSLDELPPQNNVPPRQGFHRLSHVSMFRSGFSSVSIIIRAPMFSWTHRSAEFTWTFESNIIITQIPLVKAYQIGSGTIVRKGPCTGGDILRR	:	501
cry1a	:	DSLDELPPEDNSVPPREGYSHRLCHATFVRKSG---TPFLTGVVFWSDTRSAFTINTIDPERINOIPLVKFRVWGTSVITGPGTGGDILRR	:	498
cry2a	:	RPLHYNQIRNIESPGTTPGGAAYLVSVHNRKN-----NIYANENGTHLAPEDYTGFTTSPHATQVNNQTRTFISERFGNQEDSLRF	:	525
cry3a	:	DSIDLPPETDEPLEKGYSHQNLNVMCFILMQG-----SRGTIPVLTWTHKSDVFFNMIDSKITOLPLVKAYKLOSGASVAVGPRFTGGDILRR	:	548
cry1a	:	DSENELPPEATGQPNYESYSHRLSHIGLISASH-----VKALVYSWTHRSADRTWTFEPNSITQIPLVKAPNLSGAAVVRGPGTGGDILRR	:	538
cry7a	:	DSIDLPPDG--EPIHEKYTHRLCHATAIFKSTP--DYDNATIPIFSUTHSAEVYNNRIYPNKITIKIPAVKMYKLDLPSTVVKGPCTGGDILRR	:	528
AXMI-004	:	TGPGTFGDMRININAPLSQRYVRVIRYASTDLOFVTSINGTTINIG-----NFPKTTNNLTILGSEGYRTVSFSTPFSFNAQSIIFRLG---	:	608
cry1aC	:	NSSGNNIQNRGYIEVPIHFPSTSTRYVRVRYASVTPIHLMVNGNS--SIFSNTPATATSLDNQSSDFGYFESANAFSTSLGNIVGVNR---	:	591
cry1a	:	NTFGFVSLOQVINSPIQRYRLFRYASRDARVILVTEAASTGVGGQVSVNPLQKTIMEIGENLTSTRTFRYDFSNPFSFRANPDIIIGISEQP	:	593
cry2a	:	EQSNITARYTLRGNG---NSYNYLVRVSSIGNSTIRVTINGRYVYVSN-----VNTTNDGVNDNGARFSDINIGNIVASDNTWVLDIN---	:	608
cry3a	:	TENGSAATYVTPDVSYSKYRARIHYASTSQTITFLSLDGAFFNOY-----YFDKTTINKGDTLTYSFNLASFSTFELSNNLIQIGVTC---	:	634
cry1a	:	TNTGTFGDIRVNIINPPFAQRYVRVIRYASTDLOFHTSINGKAINQG-----NFSATMNRGEDLDYKTRIVGVFTTFFSFLDVQSTFTIG---	:	623
cry7a	:	GSTGYIGDIRKATVNSPLSQRYVRVIRYASTDLOFHTSINGKAINQG-----KFNQNTVETIGEGKOLTYGSGFYIEYSTTITQFPDEHPKITLHLS-	:	618
AXMI-004	:	--IQAFSGVQVYVVDKIEFIPVE-----	:	629
cry1aC	:	-----FSGTAGVILDRFEFIPVATLEAEYNLERAKAVNALFTSNOLGLKINVDYHIDQVSNLV	:	653
cry1a	:	LFGAGSTSSGELYIDKIEIILADATFEAESDLERAKAVNALFTSSNIGLKTVDYHIDQVSNLV	:	660
cry2a	:	---VTLNSGTFPDLNININFPVTLNPLPY-----	:	633
cry3a	:	-----LSAGDKVYIDKIEFIPV-----	:	652
cry1a	:	---AUNFSSGENEYVIDRIEFVFPVEVYAEYDFEKAQEKVATLFTSNPGLKTVDYHIDQVSNLV	:	688
cry7a	:	-----DLSNNSSTFVVDSTIEFIPVDVNYAEKLEKAKAVNTLFT-GRNALQKVDYDKVDQVSNLV	:	680

FIG. 1B

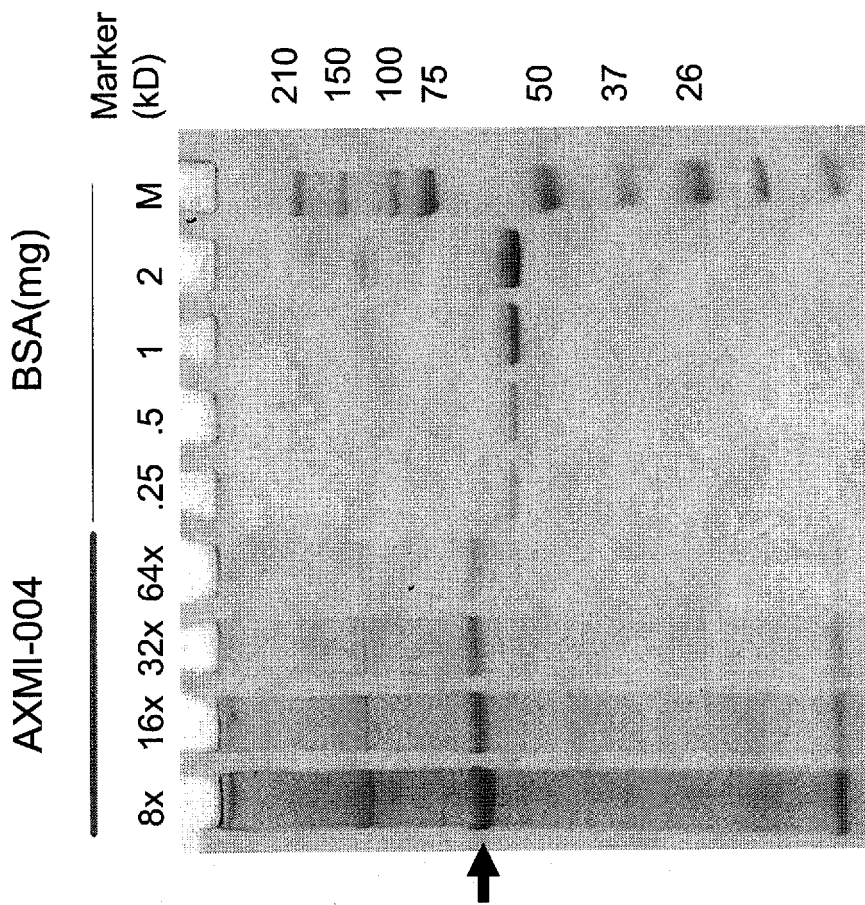


FIG. 2